

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ross D. Snyder on 7/29/10.

The application has been amended as follows:

1. (Currently amended) A network administration method for provisioning logical configuration links for at least two network devices through a dedicated graphical user interface form, the method comprising:

- selecting a network device having at least one network interface through the dedicated graphical user interface form;

- determining local interface and next neighbor information for the network device;

- determining whether the local interface and next neighbor information is associated with a logical configuration link stored among a plurality of logical configuration links in a logical link database;

- creating a new logical configuration link when the local interface and next neighbor information is not associated with any of the logical configuration links in the logical link database;

- storing the new logical configuration link in the logical link database;

- validating the new logical configuration link;

- sending the new logical configuration link to the network device; and

- displaying a graphical representation of the new logical configuration link on a display device, wherein the step of creating the new logical configuration link further comprises the steps of:

- selecting a link type;

selecting a link numbering type for the new logical configuration link;
selecting a link application for the new logical configuration link;
selecting a sub layer interface type for the new logical configuration link;
creating a first endpoint for the new logical configuration link; and
creating a second endpoint for the new logical configuration link, wherein the step
of selecting the link application further comprises the step of:

selecting the link application from a group consisting of: Internet Protocol
Forwarding, Multi-Protocol Label Switching and Internet Protocol Forwarding,
and Multi-Protocol Label Switching.

2. (Canceled)

3. (Currently amended) The method of claim 2 1, wherein the step of selecting the link type further comprises the step of:

selecting the link type from among a group consisting of: point-to-point, point-to-IP, and point-to-subnet.

4. (Currently amended) The method of claim 2 1, wherein the step of selecting a link numbering type further comprises the step of:

selecting the link numbering type from a group consisting of: a numbered type and an unnumbered type.

5. (Canceled)

6. (Currently amended) The method of claim 2 1, wherein the step of selecting a sub layer interface type further comprises the step of:

selecting the sub layer interface type from a group consisting of: Packet Over Sonet, Asynchronous Transfer Mode, and GigEthernet.

7. (Original) The method of claim 1, further comprising the step of:

modifying a logical configuration link in the logical link database.

8. (Original) The method of claim 1, further comprising the step of:
deleting a logical configuration link in the logical link database.

9. (Currently amended) Apparatus for provisioning logical configuration links comprising:
a logical link database for storing logical configuration links;
a processing system coupled to the logical link database for accessing the logical link database; and
a display device coupled to the processing system for displaying a graphical user interface form comprising a graphical representation of a logical configuration link, wherein the processing system creates a new logical configuration link when the local interface and next neighbor information is not associated with any of the logical configuration links stored in the logical link database, wherein the processing system creates the new logical configuration link by selecting a link type, selecting a link numbering type for the new logical configuration link, selecting a link application for the new logical configuration link, selecting a sub layer interface type for the new logical configuration link, creating a first endpoint for the new logical configuration link, and creating a second endpoint for the new logical configuration link, wherein the processing system selects the link application by selecting the link application from a group consisting of: Internet Protocol Forwarding, Multi-Protocol Label Switching and Internet Protocol Forwarding, and Multi-Protocol Label Switching.
10. (Original) The apparatus of claim 9 wherein the display device provides an ability to select a network device having at least one network interface through the graphical user interface form.
11. (Original) The apparatus of claim 9 wherein the processing system determines local interface and next neighbor information for the network device.
12. (Original) The apparatus of claim 11 wherein the processing system determines whether the local interface and next neighbor information is associated with one of the logical configuration links stored in the logical link database.
13. (Canceled)

14. (Currently amended) The apparatus of claim ~~13~~ 9 wherein the processing system causes the new logical configuration link to be stored in the logical link database.

15. (Original) The apparatus of claim 14 wherein the processing system validates the new logical configuration link.

16. (Original) The apparatus of claim 15 wherein the processing system causes the new logical configuration link to be sent to the network device.

17. (Previously Presented) The method of claim 1 wherein creating the new logical configuration link when the local interface and next neighbor information is not associated with any of the logical configuration links in the logical link database occurs based on interfaces information entered by a user.

18. (Currently amended) A method for provisioning logical configuration links comprising:

- selecting a link type;
- selecting a link numbering type;
- selecting a link application;
- selecting a sub layer interface type;
- creating a first endpoint;
- creating a second endpoint;
- populating form panels with the link type, the link numbering type, the link application, and the sub layer interface type;
- receiving user input of interfaces information;
- validating the interfaces information;
- creating a link in accordance with the interfaces information; ~~and~~
- provisioning the link; and
- displaying on a display device a graphical user interface form comprising a graphical representation of the link, wherein the step of selecting the link application further comprises the step of:

selecting the link application from a group consisting of: Internet Protocol Forwarding, Multi-Protocol Label Switching and Internet Protocol Forwarding, and Multi-Protocol Label Switching.

Allowable Subject Matter

Claims 1, 3, 4, 6-12, and 14-18 are allowed.

The following is an examiner's statement of reasons for allowance:

Prior art either alone or in combination doesn't show or teach "selecting a link type;

- selecting a link numbering type;
- selecting a link application;
- selecting a sub layer interface type;
- creating a first endpoint;

creating a second endpoint;
populating form panels with the link type, the link numbering type, the link application, and the sub layer interface type;
receiving user input of interfaces information;
validating the interfaces information;
creating a link in accordance with the interfaces information; and
provisioning the link; and
displaying on a display device a graphical user interface form comprising a graphical representation of the link, wherein the step of selecting the link application further comprises the step of:

selecting the link application from a group consisting of: Internet Protocol Forwarding, Multi-Protocol Label Switching and Internet Protocol Forwarding, and Multi-Protocol Label Switching.”

in combination with other features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KE whose telephone number is (571)272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peng Ke
/Peng Ke/
Primary Examiner, Art Unit 2174